# Florida Department of Transportation



Specifications Handbook

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#### **SECTION 1- INTRODUCTION**

#### 1-1 General

This handbook provides guidance in the preparation of Specifications Packages and describes various components of the Specifications Packages. This handbook is to be used by districts and consultants in conjunction with the current Specifications Package Preparation Procedure Topic Number 630-010-005 e.

#### 1-2 Definitions

**Appendices:** Documents appended to and made a part of the Specifications Package, providing pertinent special conditions and supporting documentation specific to the project. These may include Technical Special Provisions and other applicable documents.

**Developmental Specifications:** Specifications developed around a new process, procedure, or material approved for limited use by the State Specifications and Estimates Office. These specifications are signed and sealed in accordance with Chapters 471, 481, or 481 Part 2, F.S. by the individual responsible for authorizing their use and monitoring their performance in the field.

**Engineer of Record:** The professional engineer who signs, dates, and seals the Specifications Package in accordance with Chapter 471.025, F.S. and Rule 61G 15-23.004, F.A.C. This individual may perform the initial review or final review.

**Legal Review:** The Office of the General Counsel reviews the Specifications Package to verify conformance with applicable law and to protect the Department from potential liability.

**Modified Special Provision:** A specification, prepared, signed, and sealed in accordance with Chapters 471, 481, or 481 Part 2, F.S., that revises an implemented specification (Standard Specification, Supplemental Specification, or Special Provision) to address a project specific need and is approved for use by the State Specifications Engineer.

**Quality Control Plan:** A comprehensive, well-defined, written set of procedures and activities designed to ensure that all Specifications Packages and Supplemental Specifications Packages are produced to the highest level of quality.

**Special Provisions:** Specific clauses adopted by the Department that add to or revise the Standard Specifications or Supplemental Specifications, setting forth conditions varying from or additional to the Standard Specifications or Supplemental Specifications applicable to a specific project or a specific set of conditions.

**Specifications Package:** The document signed and sealed by the Engineer of Record prepared for inclusion in the contract documents and comprised of the following components as they apply:

- 1. Special Provisions, in numerical order according to section, article or subarticle of the Standard Specifications,
- 2. Developmental Specifications, also in numerical order,
- 3. Supplemental Specifications, also in numerical order,
- 4. Appendices.

# Standard Specifications: "Standard Specifications for Road and Bridge

**Construction**", an electronic book, applicable to all Department contracts containing adopted requirements, setting out or relating to the method or manner of performing work, or to the quantity and quality of materials and labor.

**Supplemental Specifications:** Approved additions and revisions to the Standard Specifications, generally applicable to all Department contracts or having statewide application.

**Supplemental Specifications Package:** A signed and sealed document reflecting changes to a previously signed and sealed Specifications Package and issued prior to the bid opening.

**Technical Special Provisions (TSPs):** Specifications of a technical nature, prepared, signed, and sealed in accordance with Chapters 471, 481, or 481 Part 2, F.S., that are made part of the contract as an attachment to the contract documents. TSPs describe work that is not covered by the Standard Specifications or Workbook and are included as Appendices in a Specifications Package.

**Usage Notes:** Guidance in the Workbook setting forth general conditions under which a Special Provision or Supplemental Specification would apply to a project.

**Workbook:** Adopted modifications to the implemented Specifications issued for statewide implementation. The Workbook is used for the preparation of Specifications Packages and is updated and issued every 6 months by the State Specifications and Estimates Office.

#### SECTION 2 – SPECIFICATIONS PACKAGE

The process for preparing a Specifications Package is a progression of identifying, comparing, resolving, and compiling. Two individuals, an initial reviewer and final reviewer, independently review the project plans and files and identify the applicable Supplemental Specifications and Special Provisions in the Workbook and the need for a Developmental Specification, Technical Special Provision, or modification to an implemented specification. These two individuals then compare the results of their review and resolve any differences. Once all issues have been resolved, the Specifications Package is compiled, reviewed, and signed and sealed by the Engineer of Record.

# 2-1 Specifications Package File

Create a file to maintain the individual documents and correspondence that will be used to prepare the specifications packages and supplemental specifications packages.

#### 2-2 Pre-Check

Review the project plans and files along with the applicable implemented specifications early in the design development process to determine if the specifications address the needs of the project or if a Modified Special Provision, Developmental Specification, or Technical Special Provision is needed.

- 2-2.1 Modified Special Provision (MSP). Use a MSP if an implemented specification does not adequately address the needs of the project. Coordinate with the District Specifications Office to edit the specification, and submit the modified version to the District Specifications Office for their review and approval. Upon District approval, the MSP will be submitted to the State Specifications Engineer for approval to use as a project specific Special Provision. Do not use plan notes to modify an implemented specification.
- 2-2.2 Developmental Specification. Use a Developmental Specification if the Department wants to try a new process, procedure, or material on a project. The District Specifications Office will submit a request to use a Developmental Specification on a project to the State Specifications Office. The request must contain as a minimum the FPID number and letting date. Upon receipt, the State Specifications Office will forward the request to the monitor of the Developmental Specification for review and approval.
- 2-2.3 Technical Special Provision (TSP). Use a TSP if an implemented Division II or III specification does not address or cannot be modified to address the needs of the project. Coordinate with the District Specifications Office to determine if a TSP is needed. If a TSP is needed, prepare in accordance with Section 3 of this handbook and submit to the District Specifications

Office for review. Avoid plan notes and do not use a TSP to override an implemented specification.

#### 2-3 Initial Review

The initial reviewer will:

- 2-3.1 Check the plans and specifications package file to ensure all information necessary to prepare a complete Specifications Package is included. Information typically includes, but is not limited to:
  - (a) Permit notices from the District Office responsible for permit coordination,
  - (b) Utility/Railroad Agreements or memos from the District Utility and Rail Offices.
  - (c) Contract time from the District Construction Office,
  - (d) Special limitations of operation from the District Construction Office,
  - (e) Modified Special Provisions with approval as needed,
  - (f) Developmental Specifications with approval as needed,
  - (g) Technical Special Provisions with review and approval as needed.
- 2-3.2 Review the plans, specifications package file, and Workbook to determine that all proposed work is covered by an approved specification, to ensure all issues have been addressed, and to verify the plans do not conflict with the specifications.
- 2-3.4 Identify the specifications to be compiled into the Specifications Package based on the project needs and Usage Notes. Provide insert information in Special Provisions as required.

#### 2-4 Final Review

The final reviewer will independently perform the tasks of the Initial Review. The initial reviewer and final reviewer will compare results, resolve any conflicts and outstanding issues, and ensure all information is complete.

# 2-5 Specification Package Assembly

The initial reviewer, final reviewer, or Engineer of Record will compile the Specifications Package using the web application Specs on the Web.

## 2-6 Quality Control Review

The Specifications Package will be reviewed in accordance with the Quality Control Plan to verify all applicable specifications are included, insert information is properly entered, and the package is complete.

# 2-7 Legal Review

2-7.1 Individual Supplemental Specifications or Special Provisions in the Specifications Package compiled from the implemented Workbook that

have not been modified do not require a review by the Office of General Counsel.

- 2-7.2 Modified Special Provisions. All modifications to implemented specifications must be reviewed by the Office of General Counsel. The District and State Specifications Offices will coordinate these reviews.
- 2-7.3 Technical Special Provisions. All Technical Special Provisions must be reviewed by the Office of General Counsel. he District Specifications Office will coordinate these reviews.

## 2-8 Signing and Sealing

The Engineer of Record will review the Specifications Package, sign and seal, and submit to the appropriate Department Office.

# 2-9 District Quality Control Check

The District Specifications Office will check the Specifications Package for completeness and accuracy in accordance with the District Quality Control Plan prior to the PS&E submittal to the State Specifications and Estimates Office or the District Contracts Office.

## 2-10 Reissued Specifications Package

Prepare a Reissued Specifications Package when a project is being re-advertised. Update the Reissued Specifications Package to the current Workbook, if applicable. Prepare the Reissued Specifications Package in accordance with the requirements of this handbook except use the word "REISSUED" preceding the Specifications Package date.

# 2-11 Supplemental Specifications Package

Prepare a Supplemental Specifications Package when it becomes necessary to revise either the Specifications Package or a previous Supplemental Specifications Package once it has been submitted to and accepted by the State Specifications and Estimates Office or the District Contracts Office. Prepare the Supplemental Specifications Package in accordance with the requirements of this handbook.

#### **SECTION 3 – TECHNICAL SPECIAL PROVISIONS**

Identify the need for a Technical Special Provision (TSP) as early as possible in the design development of the project and coordinate with the District Specifications Office as outlined in 2-2 of this handbook. The process of developing a TSP should parallel the process of developing the plans.

# 3-1 Development and Format

A TSP must complement the plans, specifications, and other contract documents and not create any conflicts. A TSP must describe the work to be performed, identify the material requirements, describe the construction or installation requirements, and state how the item will be measured and paid. All TSPs are project specific so any previous TSPs used as references should be reviewed in detail before incorporation.

The following guidelines for development of TSPs are a compilation of issues frequently observed during reviews.

- 1. Do not use a TSP to override an implemented specification.
- 2. Do not use a TSP to modify Sections 1 thru 9 of implemented specifications.
- 3. Do not use statements such as, "if a conflict exists, the more stringent requirement prevails."
- 4. Avoid special requirements for the material or construction of concrete.
- 5. Use performance criteria.

Provide justification if a patented or proprietary product or process is required. Refer to the Guidance for Approval of Proprietary Products on the State Specifications and Estimates Office website and the Construction Program Guide- Patented and Proprietary Products on the FHWA website at the following URLs:

http://www.fhwa.dot.gov/construction/cqit/propriet.cfm

Guidance for Approval of Proprietary Products <a href="http://www.dot.state.fl.us/programmanagement/PackagePreparatio">http://www.dot.state.fl.us/programmanagement/PackagePreparatio</a> n/WritingAids/Default.shtm

Do not require a patented or proprietary product or process with the term "or equal."

Use either of the following methods for traffic signals which must be compatible with a countywide computerized traffic control system:

- (a) Add a note on the plans stating "Must be compatible with (Broward, etc.) County Traffic Control System."
- (b) Add a TSP with the details required instead of using a plan note.
- 6. Do not use sketches, pictures or drawings in a TSP.
- 7. Do not reference the Qualified Products List or the Approved Products List.
- 8. Do not specify a contractor's warranty or increase the time period of a standard manufacturer's warranty. Standard manufacturer's warranties should be transferable to the Department at final acceptance.
- 9. Do not require bidders to submit documents or data with the bid or include forms that may imply that they be returned with the bid.
- 10. Do not include cost estimates, summary of quantities, traffic control phasing, work schedules, or names of suppliers.

The format and style of a TSP should resemble as much as possible the format and style of implemented specifications. Prepare TSPs in accordance with the Style Guide for Specifications and Specifications Format Template available on the State Specifications and Estimates Office website at the following URL:

 $\frac{http://www.dot.state.fl.us/programmanagement/PackagePreparation/WritingAids/Default.}{shtm}$ 

Use the following guidelines for formatting TSPs:

- 1. Provide a "T" preceding the section, article or subarticle number when the TSP supplements an existing implemented specification.
- 2. Provide a table of contents for TSPs over 15 pages. A table of contents is recommended for TSPs over 10 pages.
- 3. Number all pages consecutively with the signed and sealed cover sheet as page 1 of x. Do not use page numbering such as "10 A". Add an additional page number when the TSP is inserted to reflect the consecutive numbering within the Specifications Package.
- 4. Provide definitions at the beginning of the TSP, if needed, and indicate these definitions apply only to the TSP and not to any other contract documents. Review the definitions in Article 1-3 of the implemented specifications before including any definitions in the TSP.

- 5. Provide a signed and sealed cover sheet for each TSP prepared as shown in 3-5. Do not provide company logos or headings on the cover sheet.
- 6. Refer to the Standard Specifications, Supplemental Specifications, or Special Provisions as "FDOT Specifications". Refer to another portion of the TSP as "this Technical Special Provision."
- 7. Use the term "Engineer" when referring to the Department or Department's representative. Do not use references such as Geotechnical Engineer or similar.

# 3-2 Utility Work

Define the utility work in the plans and specifications when the utility work is to be performed by the contractor under contract with the Department. Specifications from the utility owner may be incorporated as TSPs to define the utility work since the Department does not routinely perform utility work and the work is very specialized. Only include the technical aspects of the utility work. Do not include any language resembling Division I General Covenants and Requirements or construction work that is covered by the Department's specifications such as but not limited to excavation, embankment, or base. Ensure the specifications received from the utility owner mesh with the other parts of the plans and specifications. This may be tedious and time consuming because the utility specifications were never intended to be part of a Department contract and typically they are stand alone specifications used by the utility owner in their contracts.

- 1. Comply with all of the provisions in 3-1 of this handbook.
- 2. Ensure the TSP and utility plans are consistent with the agreement between the Department and utility owner.
- 3. Do not refer to the agreement between the Department and utility owner in the TSP.
- 4. Do not use the word "abandoned" for utilities not is service. Use "out of service" instead.
- 5. Do not replace the "Engineer" with a utility representative. The Engineer has full authority, but utility representatives may provide technical assistance to the Engineer. Alternate language may be "the Engineer, in conjunction with a utility representative," if needed.
- 6. Do not provide a list of required or suggested utility contractors, but provide reasonable objective qualifications that are required for utility contractors and their employees.

- 7. Do not use a preferred list of vendors or products if the costs for utility work are reimbursable by the Department. The utility owner must provide justification to the Department if there is a legitimate concern for compatibility requiring specific products to be stated in the TSP. Early discussions with the utility owner are required to ensure the needs of both parties to the agreement are satisfied.
- 8. A preferred list of vendors or products may be used if the costs for utility work are non-reimbursable. Contact the State Specifications Office prior to use.

## 3-3 District Office Responsibilities

The District Specifications Office shall review all TSPs for compliance with Department requirements for specification development and format and for potential conflicts with the plans and specifications. The review shall be performed in accordance with the District Quality Control Plan. In addition, the District Specifications and Estimates Office shall coordinate the legal review with the Office of General Counsel.

# 3-4 Central Office Responsibilities

The State Specifications and Estimates Office may assist the districts with the review or coordinating the review of a TSP when requested. The State Specifications and Estimates Office will perform post-letting reviews and maintain a list of TSPs to track usage so frequently used TSPs can be identified for potential further development and implementation.

# 3-5 Sample Cover Sheet

TECH	INICAL SPECIAL PROVIS FOR	ION
FINANC	IAL PROJECT ID:	
sealed using a Digital Signatı	chnical Special Provision has bee ure as required by Rule 61G 15-2 ot considered signed and sealed o vies.	23.004, F.A.C. Printed
Professional Engineer: Date: Fla. License No.:: Firm Name: Firm Address:		
City, State, Zipcode: Certificate of Authorization: Pages:		

## SECTION 4 – DESIGN BUILD PROJECTS

Specification packages for Design Build projects are developed using the implemented specifications applicable for the date the Cost Proposals are due (letting).

The Division I specifications are developed using a boilerplate provided by the State Specifications Office posted on the web at the following url: <a href="http://www.dot.state.fl.us/programmanagement/Implemented/DesignBuild/Default.shtm">http://www.dot.state.fl.us/programmanagement/Implemented/DesignBuild/Default.shtm</a>

Certain Special Provisions that may be applicable for Design Build projects are also posted on the web site and may be inserted into the boilerplate as necessary. The completed boilerplate document is attached to the RFP along with any Developmental or Modified Special Provisions required by the Department.

The Division II and III specifications are required to be incorporated into Specifications Package to be stamped "Released for Construction" prior to the Contractor beginning work.

Any changes to the Specifications Package that are within the scope of the original work will be added by Supplemental Specifications Package. Any changes to the Specifications Package that are outside of the original scope of work will be added by Construction Supplemental Agreement.

More information regarding Design Build may be found on the Construction web site: <a href="http://www.dot.state.fl.us/construction/DesignBuild/Design-Build.shtm">http://www.dot.state.fl.us/construction/DesignBuild/Design-Build.shtm</a>